Fighting the Networked Force

The First Steps: Operation Iraqi Freedom

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john.osterholz@baesystems.c

Acknowledgements

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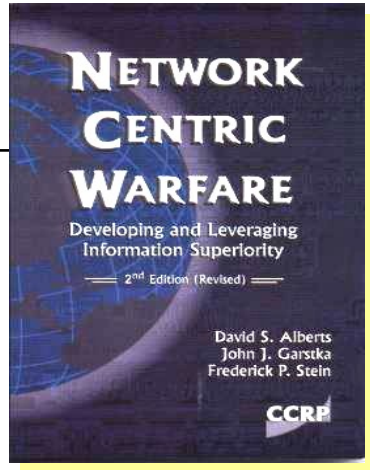
…. but mostly

men and women who liberated Iraq

Net-Centric Operations & Warfare

- **A robustly networked force improves information sharing**
- **Information sharing and collaboration enhances the quality of information and shared situational awareness**
- **Shared situational awareness enables collaboration and self synchronization, and enhances sustainability and speed of command**
- **These in turn dramatically increase mission effectiveness**



DoD Report to Congress on Network Centric War

et-Centric Operations & Warfare: The Overall Value Proposition

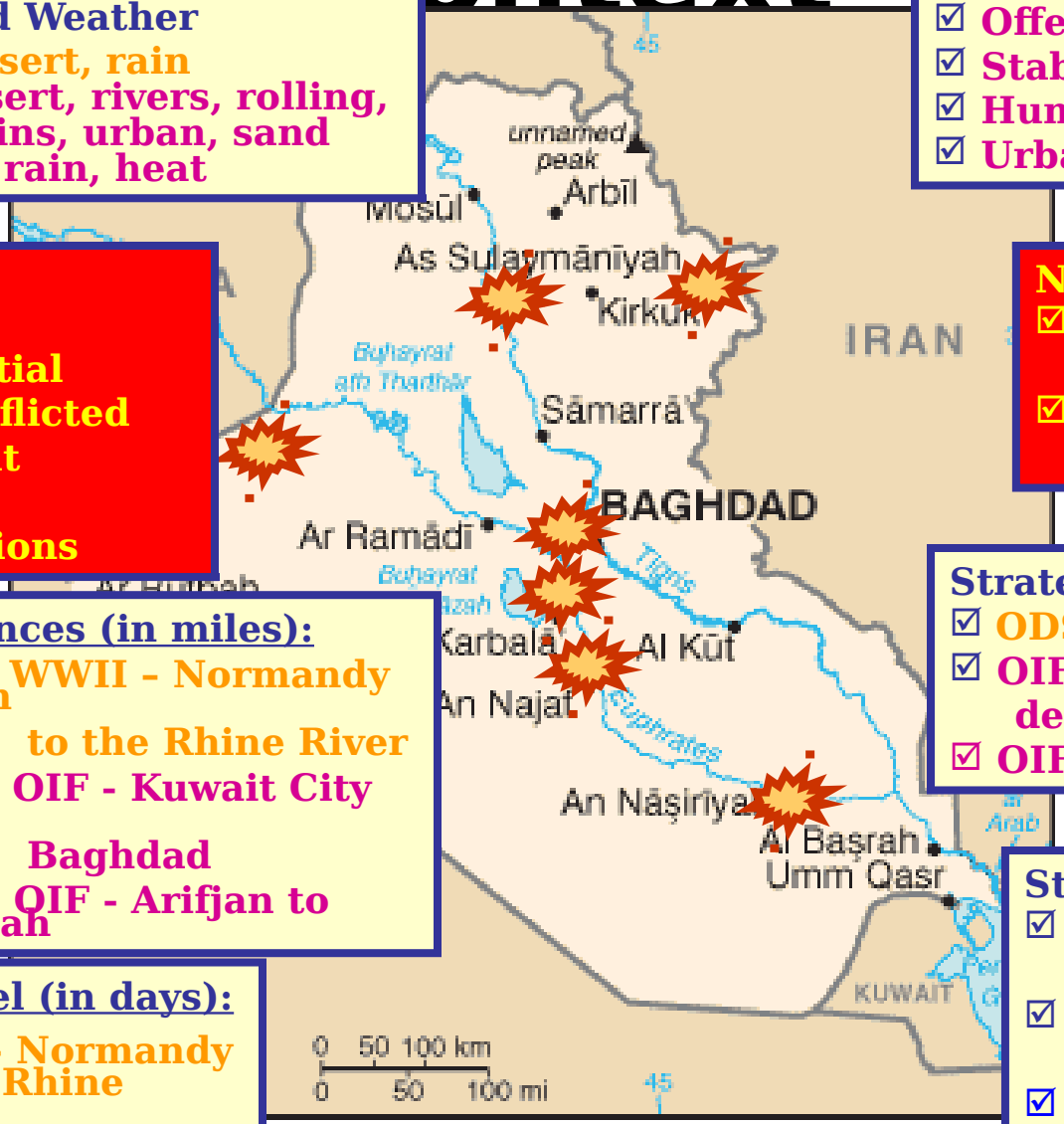
Iraqi Freedom in Context

Terrain and Weather
- ☑ ODS - desert, rain
- ☑ OIF - desert, rivers, rolling, mountains, urban, sand storms, rain, heat

Full-Spectrum Operations
- ☑ Offensive and Defensive
- ☑ Stability Operations
- ☑ Humanitarian Assistance
- ☑ Urban Operations

Joint Coherence
- ☑ ODS - Sequential Deconflicted
- ☑ OIF – Coherent simultaneous operations

Network-Centric Warfar
- ☑ ODS - GPS, artillery and missile defense c
- ☑ OIF - All systems functionally network



Distances (in miles):
- 400: WWII – Normandy Beach to the Rhine River
- 350: OIF - Kuwait City to Baghdad
- 450: OIF - Arifjan to Fallujah

Strategic Movement
- ☑ ODS - Set-piece
- ☑ OIF - Fight and deploy simultaneously
- ☑ OIF - Strategic reinforcem

Time to Travel (in days):
- 274: WWII – Normandy Beach to the Rhine River
- 16: OIF - Kuwait City to Baghdad

Strategic Preparation
- ☑ ODS – Kuwaiti Surpris Invasion
- ☑ OIF - 12 year preparat Ports, camps, HQs
- ☑ OIF - Situational Understanding

TRADOC Lessons Learned

Operations Iraqi Freedom - Operation Desert Storm Contrasts

Conventional Artillery

☑ ODS 40 rounds per tube primarily preparatory fires

☑ OIF 263 rounds per tube primarily suppression and killing fires

Friendly Forces

☑ ODS – 5x HVY Divs and 2x AASLT/ABN

☑ OIF ~2x HVY Divs and 2x AASLT/ABN Div Equiv

Enemy

☑ ODS~60 DIVs

☑ OIF ~17 DIVs

Casualties

☑ ODS 98 Army

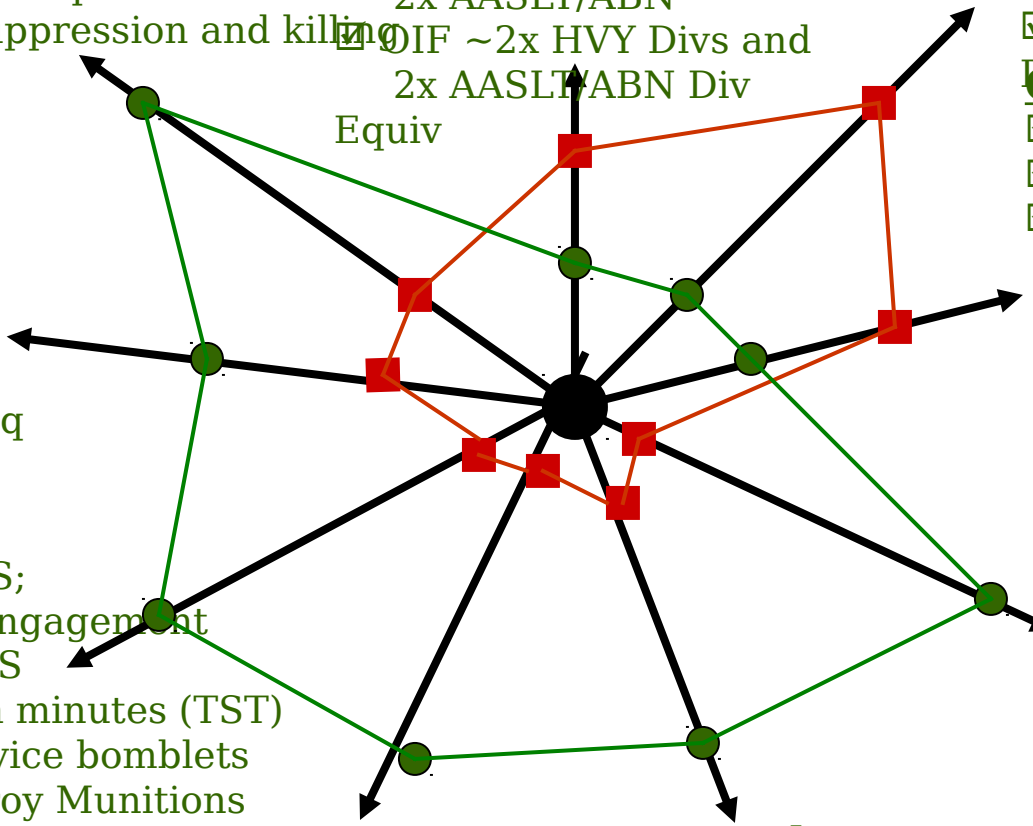
☑ OIF 53 Army

☑ 4 days vs 40 days

Scale

☑ ODS Ground Ops AO ~ 40 k sq mi

☑ OIF Ground Ops AO ~437 k sq mi



Army Watercraft

☑ Largest JLOTS since Vietnam

☑ OIF More than 5300 containers and other cargo over the shore

☑ ODS no such effort

☑ TSV moved equivalent of 1000 C130 sorties

☑ No TSV in ODS

Fires

☑ ODS 32 ATACMS; over hour per engagement

☑ OIF 414 ATACMS engagements in minutes (TST)

☑ Unitary rounds vice bomblets

☑ Sense and Destroy Munitions

Joint Tactical Air & Missile Defense

Army-led, fully Joint

☑ ODS fired 156 Patriots against 85 TBM with unverifiable results

☑ OIF fired 25 patriots against 9 TBM destroyed 9

Iraqi Freedom

Desert Storm

Urban Operations

☑ ODS - Kafji

☑ OIF - 10 Major City fights

TRADOC Lessons Learned

Example: Move with Precision

Collaboration --C2V

During the sand storm, collaboration between LTG Wallace, LTG McKiernen, and LTG Conway allowed dynamic adjustment of the plan/order

On the Move Connectivity - C2V

C2Vs' fully mobile INMARSAT 64kbps voice and data connectivity heavily relied upon by Corps thru Bde commanders in the fight

Mobility LDOC

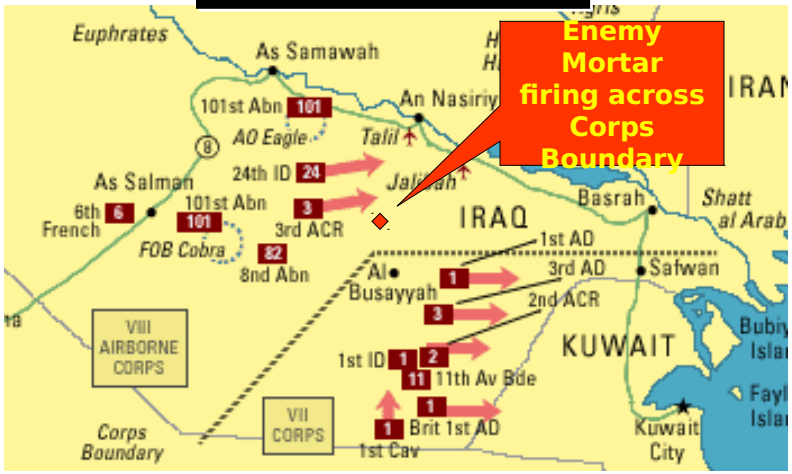
101st AAD praised its quick setup time (<30 minutes for DRASH tent setup and full comms initiation) and reliability

Agility - Bradley BCOTM

"I am a big fan of the Bradley for Bde Commanders. What we have learned is the absolute necessity of TACSat over the distances we will operate on today's battlefield and the one in the future." **- MG Odierno**

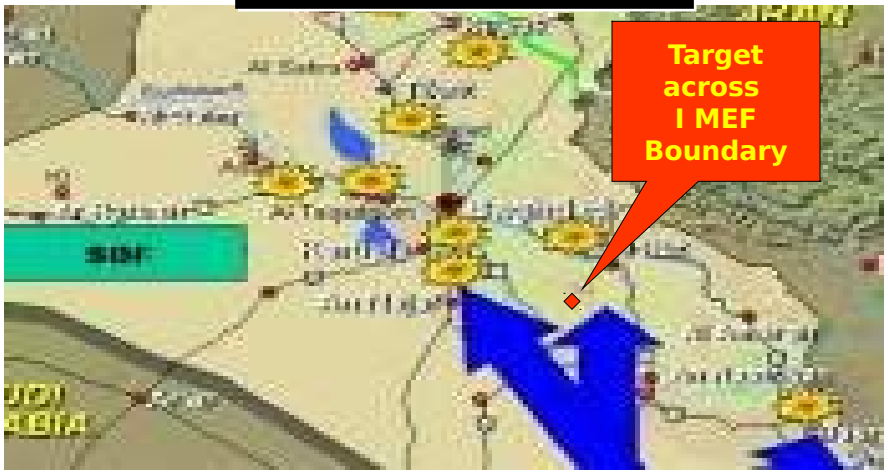
Example: Engage with Precision

Desert Storm



- *7 hours to clear fires into VII Corps sector due to lack of SA and digital connectivity*
- *TACFIRE Cross-Corps interop limited to Corps-to-Corps nets*

Iraqi Freedom

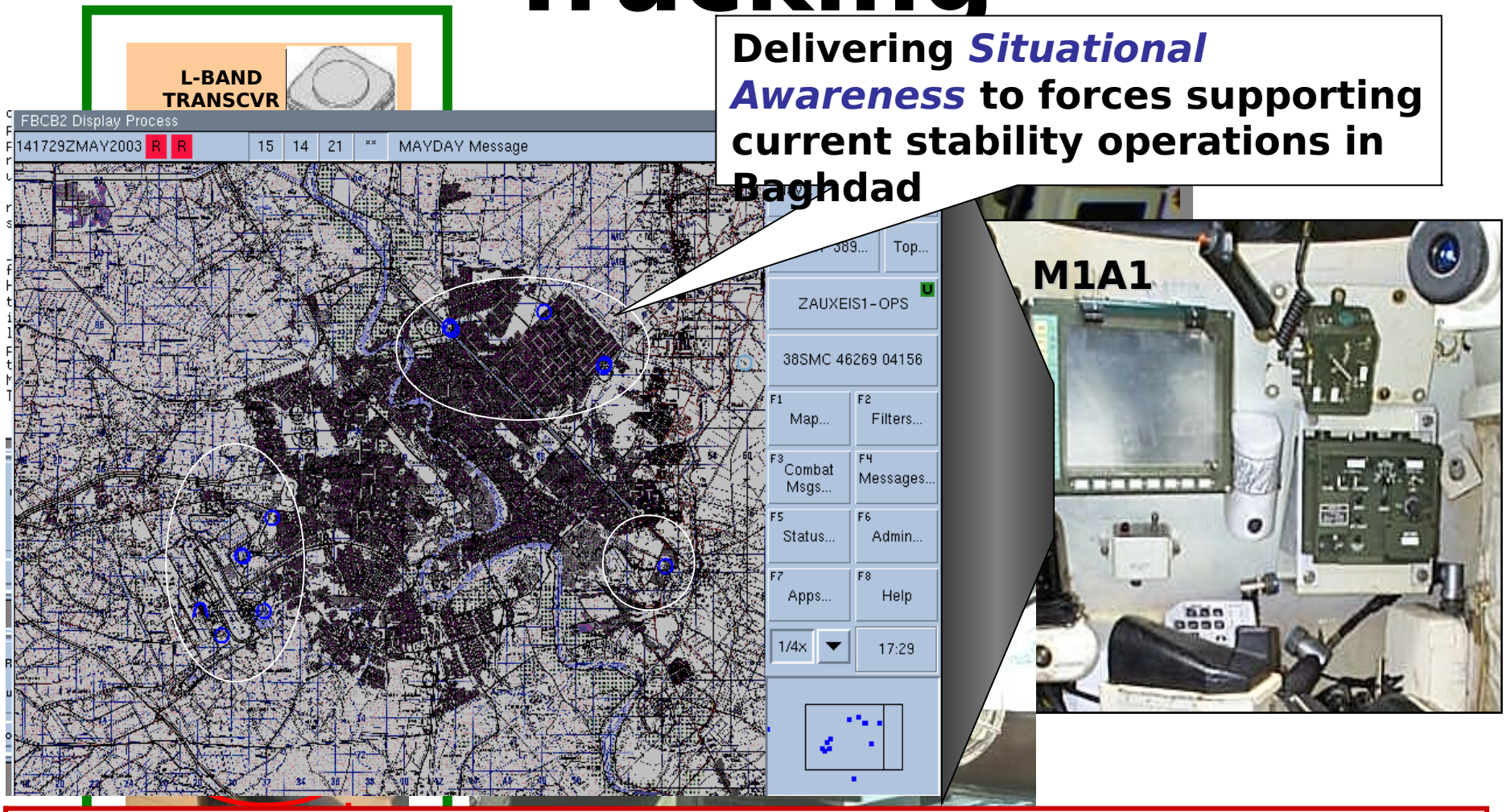


- *Use of AFATDS in Army and Marine Corps allowed cross boundary digitized coordination*
- *Coordination from 3ID to I MEF direct and conducted in 45 seconds*

Facilitated by common software baseline upgrade across the OIF force

Example: Blue Force Tracking

Delivering *Situational Awareness* to forces supporting current stability operations in Baghdad



"When my TF seized a key highway intersection south of Baghdad, I could see the company commander icons at each blocking position and I knew we had control of the objective." **- LTC John Charlton, Cdr TF 1-15, 3 ID**

Example: Joint Command & Control

Combined Arms Team and Joint Ops

- Fight for Saddam Int'l Airport [1st BDE CMBT TM "Raiders"] continuous movement through the night moved under the cover of rotary wing and artillery support (500 artillery rounds, 90 rockets, 4x2000 lbs, 3 satellite guided bombs) during the 12 hours fight for the airport
- During the battle of the sandstorm (visibility only 25m) the Blue Force tracker allowed 1st BCT to cross Tigress river with the support of B-1 bombers and attack helicopters
- 80% of Air Mission launched without targets - directed in flight via ISR and Ground feeds

Example: 21st Century Command C

Pressing Net-Centric Challenges

- **Extending the IP fabric into the tactical echel**
- **Flattening the information hierarchy within O**
- **Cross domain information sharing**
- **Smart deployment of new capabilities**

When Its All Said And Done